

**SDC 1. Summary of RCTs Evaluating DRT**

<b>Study</b>	<b>Patients</b>	<b>Treatments</b>	<b>Outcomes</b>
<b>Burns</b>			
Heimbach 1988 <sup>12</sup>	Children/adults with life-threatening burns not expected to heal within 3 weeks (N = 106)	DRT versus SOC covering	DRT improved outcomes vs SOC: <ul style="list-style-type: none"> <li>• ↓ donor site thickness (<math>p &lt; 0.001</math>)</li> <li>• Faster healing donor site (<math>p &lt; 0.001</math>)</li> </ul> SOC associated with ↑ take ( $p < 0.0001$ )
Branski 2007 <sup>20</sup>	Pediatric; burn size $\geq 50\%$ TBSA; $\geq 40\%$ TBSA full-thickness burn (N = 20)	DRT versus autograft/allograft SG	DRT improved short-term outcomes vs SG: <ul style="list-style-type: none"> <li>• ↓ resting energy expenditure (<math>p &lt; 0.01</math>)</li> <li>• ↑ serum constitutive proteins (<math>p &lt; 0.03</math>)</li> </ul> DRT improved long-term outcomes vs SG: <ul style="list-style-type: none"> <li>• ↑ bone mineral content/density (<math>p &lt; 0.05</math>)</li> <li>• Improved scarring (<math>p &lt; 0.01</math>)</li> </ul>
Lagus 2013 <sup>65</sup>	Adults, TBSA $> 20\%$ ; third-degree burns requiring fascial excision (N = 10)	DRT versus cellulose sponge versus STSG (all 3 treatments were applied to each	Similar outcomes in terms of take rate, histological, cosmesis and functional outcomes

Study	Patients	Treatments	Outcomes
		patient in 3 adjacent areas)	
Vana 2020 <sup>16</sup>	Age 13-65 years with limited mobility due to sequelae of deep partial or full-thickness burns; Vancouver Scar Scale >6 (N = 24)	DRT versus single-layer dermal	Similar outcomes for: <ul style="list-style-type: none"> <li>• Matrix take rate</li> </ul> DRT improved outcomes vs single layer for: <ul style="list-style-type: none"> <li>• Retraction rate</li> <li>• Skin quality</li> <li>• Mobility recovery</li> </ul>
<b><i>Limb Salvage</i></b>			
Driver 2015 <sup>24</sup>	Age ≥18 years; full-thickness DFU 1-12 cm <sup>2</sup> post-debridement (N = 307)	DRT versus SOC	DRT improved outcomes vs SOC: <ul style="list-style-type: none"> <li>• ↑ complete ulcer closure rate (<math>p = 0.001</math>)</li> <li>• ↓ time to ulcer closure (<math>p = 0.001</math>)</li> <li>• ↑ rate of reduction of wound size (<math>p = 0.012</math>)</li> <li>• Improved quality of life SF-36 scores:               <ul style="list-style-type: none"> <li>○ ↑ Physical functioning (<math>p = 0.047</math>)</li> <li>○ ↓ Bodily pain (<math>p = 0.033</math>)</li> </ul> </li> </ul>
<b><i>Trauma</i></b>			

<b>Study</b>	<b>Patients</b>	<b>Treatments</b>	<b>Outcomes</b>
De Angelis 2018 <sup>33</sup>	Post-traumatic wound on inferior limbs without tendon or bone exposure (N = 30)	DRT versus BLM	No difference between groups for: <ul style="list-style-type: none"> <li>• Healing time; pain-related VAS scores; patient self-estimation at complete healing; short-term scar score; re-epithelialization</li> </ul> BLM significantly improved total scar score vs DRT at 3 years ( $p = 0.001$ )
<i>Miscellaneous</i>			
Jeschke 2004 <sup>32</sup>	Trauma, decollement, neoplasm, burn, wound healing delay (N = 12)	DRT plus fibrin glue and NPWT versus DRT	DRT in combination with fibrin glue and NPWT improved outcomes vs conventional DRT: <ul style="list-style-type: none"> <li>• ↑ take rate (<math>p &lt; 0.003</math>)</li> <li>• ↓ time to skin transplantation (<math>p &lt; 0.002</math>)</li> </ul>

DFU = diabetic foot ulcer; DRT = Dermal Regeneration Template; BLM = Bi-Layer Matrix; NPWT = negative-pressure wound therapy; RCT = randomized control trial; SF-36 = 36-item Short Form Survey; SG = skin graft; SOC = standard of care; STSG = split thickness skin graft; TBSA = total body surface area; VAS = Visual Analog Scale.